

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S17	1230	310/15.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:21
S19	1147	310/15.ccls. and @pd<"20060915"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:22
S20	2	S19 and laser welding	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:22
S21	19	("4219752"   "4742259"   "4910861"   "4973872"   "5040286"   "5144735"   "5175461"   "5237737"   "5345129"   "5345669"   "5563463"   "5881447"   "5898990").PN. OR ("6084330").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/01/15 15:23
S22	73	S19 and vibrator	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:31
S25	75	S19 and (vibrator or vibration actuator)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:33
S26	109	S19 and (vibrator or vibration actuator or voice coil)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:36

S27	122	S19 and (suspension or (leaf spring))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:36
S28	126438	"310".clas. and @pd<"20060915"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:38
S29	4102	S28 and (vibrator or vibration actuator)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:38
S30	425	S29 and (suspension or (leaf spring))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:38
S31	32	S30 and (cell or mobile)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:39
S32	297	S29 and diaphragm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 15:45
S33	126438	"310".clas. and @pd<"20060915"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 16:46
S34	4102	S33 and (vibrator or vibration actuator)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 16:46

S35	1101	S34 and hole\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 16:46
S36	212	S35 and (suspension or (leaf spring))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 16:47
S37	3	"11007286"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 17:44
S38	3	"2002191092"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2008/01/15 17:45
S39	102	((MINORU) near2 (UEDA)). INV.	US-PGPUB; USPAT	ADJ	ON	2008/01/15 17:50
S40	48	((SATOSHI) near2 (TAKEUCHI)).INV.	US-PGPUB; USPAT	ADJ	ON	2008/01/15 17:51
S41	1	((ETUO) near2 (OONO)). INV.	US-PGPUB; USPAT	ADJ	ON	2008/01/15 17:51
S42	2	"20070194633".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2008/06/03 14:46
S43	3526	310/12,13,14.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 09:17
S44	977	S43 and (vibrator or vibrat \$4 or voice coil\$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 09:18
S45	58	S43 and coil\$3 and (suspension\$3 or spring \$3) and diaphragm\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 09:20
S46	1515	S43 and (vibrator or vibrat \$4 or voice coil\$3 or actuator\$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 09:20
S47	611	S46 and coil\$3 and (suspension\$3 or spring \$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 09:20

S48	11254	"381".clas. and (vibrator or vibrat\$4 or voice coil\$3 or actuator\$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 09:45
S49	2308	S48 and coil\$3 and (suspension\$3 or spring \$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 09:46
S50	1613	S49 and diaphragm\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 09:46
S51	9	("20060072248"   "20060158048"   "20060226714"   "20060244400"   "20070194635"   "20070236088"   "3663907"   "4720644"   "7030522").PN. OR ("7436088").URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2009/02/14 09:47
S52	614	381/398.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 10:24
S53	5	("4709392"   "5937075"   "6529611"   "6738389"). PN. OR ("7003130"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2009/02/14 10:36
S54	88	S52 and resonance near frequenc\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 10:52
S55	416	S49 and resonance near frequenc\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 10:53
S56	197	S49 and resonance near frequenc\$3 and hole\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 10:54
S57	33	("4675907"   "5172092"   "5524061"   "5528697"   "5546069"   "5554096"). PN. OR ("6208237"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	OFF	2009/02/14 11:05
S58	517	coil\$3 and (suspension\$3 or spring\$3) and diaphragm\$3 and resonance near frequenc \$3 and hole\$3 and (vibrator or vibrat\$4 or voice coil\$3 or actuator\$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 11:36
S59	209	coil\$3 and (suspension\$3 or spring\$3) same hole\$3 and diaphragm\$3 and resonance near frequenc \$3 and (vibrator or vibrat \$4 or voice coil\$3 or actuator\$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 11:46

S60	14	coil\$3 and (suspension\$3 or spring\$3) same hole\$3 and diaphragm\$3 and (resonance near frequenc\$3) with hole\$3 and (vibrator or vibrat\$4 or voice coil\$3 or actuator\$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 11:54
S61	354	coil\$3 and (suspension\$3 or spring\$3) and hole\$3 and diaphragm\$3 and (resonance near frequenc\$3) and (vibrator or vibrat\$4 or voice coil\$3 or actuator\$3) and (selectable or select\$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 11:59
S62	181	coil\$3 and (suspension\$3 or spring\$3) and hole\$3 and diaphragm\$3 and (resonance near frequenc\$3) and (vibrator or vibrat\$4 or voice coil\$3 or actuator\$3) and (selectable or select\$3) and arm\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 11:59
S70	5	coil\$3 and (suspension or spring\$3) and hole\$3 and diaphragm and (resonance near frequenc\$3) and hole\$3 and (vibrator or voice coil\$3 or actuator\$3) and arm\$3 and magnetic circuit\$3 and bond\$3 and laser weld\$3 and support\$3 and (elastic or deflectable) and weight\$3 and vibration and (selected or selectable) and (housing or casing or case)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/02/14 14:27

2/ 14/ 2009 2:29:52 PM

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